

**32-20227: Recombinant Human Sonic Hedgehog (Shh)(Discontinued)****Reactivity :** Human, Mouse**Alternative Name :** Hhg-1**Description****Source:E.coli**

Members of the Hedgehog (Hh) family are highly conserved proteins that are widely represented throughout the animal kingdom. The three known mammalian Hh proteins, Sonic (Shh), Desert (Dhh) and Indian (Ihh), are structurally related, and share a high degree of amino acid sequence identity (e.g. Shh and Ihh are 93% identical). The biologically active form of each Hh molecule is obtained by autocatalytic cleavage of their precursor proteins, and each corresponds to approximately one half of the N-terminal portion of the precursor molecule. Although Hh proteins have unique expression patterns and distinct biological roles within their respective regions of secretion, they use the same signaling pathway and can be substituted for one another in experimental systems. Recombinant E. coli-derived Human Sonic Hedgehog is a 20.0 kDa protein consisting of 176 amino acid residues, including an N-terminal Ile-Val-Ile sequence substituted for the naturally occurring, chemically modified, Cys residue.

**Product Info****Amount :** 5 µg / 25 µg**Purification :** Purity: >= 98% by SDS-PAGE gel and HPLC analyses.**Amino Acid :** IVIGPGRGFG KRRHPKKLTP LAYKQFIPNV AEKTLGASGR YEGKISRNSE RFKELTPNYN  
PDIIFKDEEN TGADRLMTQR CKDKLNALAI SVMNQWPGVK LRVTEGWDED GHHSEESLHY  
EGRALDITTS DRDRSKYGML ARLAVEAGFD WVYYESKAHI HCSVKAENSV AAKSGG**Application Note**

Determined by its ability to induce alkaline phosphatase production by C3H/10T1/2 (CCL-226) cells. The expected  $ED_{50}$  for this effect is 0.8-1.0 µg/ml.